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Trop, Pruner & Hu, P.C.

1616 S. Voss Road, Suite 750

Houston, TX 77057-2631

EXAMINER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/749,130  
Filing Date: December 30, 2003  
Appellant(s): PAVAN ET AL.

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Timothy N. Trop  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 5-20-09 (and amended brief on 8-11-09)  
appealing from the Office action mailed 1-15-09.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 39 and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai '688. Arai discloses a memory comprising: a pair of adjacent cells having separate floating gates (4, fig. 2); a field oxide (2, fig. 2) between said cells; a first dielectric (5, fig. 2) covering said floating gates and said field oxide; a second dielectric (10, fig. 2) over said first dielectric between said floating gates, said second dielectric having a lower dielectric constant than said first dielectric (col. 8,9); and a control gate (6, fig. 2) over said first and second dielectrics. Said first dielectric includes a nitride (col. 8). Said first dielectric includes ONO (col. 8). Said memory is a FLASH memory (col. 1).

### **(10) Response to Argument**

Appellant only appeals the grounds for rejection of claim 42 which depends upon claim 39. Claim 39 requires that "a first dielectric (5, fig. 2)... a second dielectric (10, fig. 2) over said first dielectric between said floating gates". This requirement is met since element 10 overlies element 5 (which comprises 5a, 5b, and 5c) between the floating gates (4, fig. 2). Claim 42 requires that "wherein said first dielectric includes

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ONO". ONO is a shorthand term of art requiring layers of oxide/nitride/oxide. This is met by the elements of oxide (5a, fig. 2 & col. 8), nitride (5b, fig. 2 & col. 8), oxide (5c, fig. 2 & col. 8).

Appellant's argument is that the only a portion of elements 5a and 5b that are under element 5c (and thus not between the floating gates) can be construed as part of the first dielectric since a later dependent limitation requires that the first dielectric includes ONO. There is no basis for such an interpretation. The term "includes" is an open term such as "comprising". For example a car includes a stereo system. Under applicant's interpretation this would mean that the car could not have anything but a stereo system. There is nothing in claim 42 which requires that the ONO portion exists throughout the first dielectric or at the position between the floating gates. To the contrary claim 42 merely recites that the first dielectric includes ONO with no mention that the ONO portion must be between the floating gates. The only requirement in claim 42 is that the first dielectric comprises ONO at some portion of the first dielectric.

Therefore the Examiner's rejection of claim 42 should be affirmed.

From the Merriam-Webster Online Dictionary (<http://www.merriam-webster.com/dictionary/INCLUDE>):

Main Entry: **in·clude**

Pronunciation: \in-'klüd\

Function: *transitive verb*

**2** : to take in or comprise as a part of a whole or group

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Amar Movva

/Amar Movva/

Conferees:

/Kimberly D Nguyen/

Supervisory Patent Examiner, Art Unit 2894

/Tom Thomas/

BPS, TC 2800